

FLEXIBLE SUBSTRATE MOUNTED SOLID-STATE LIGHT SOURCES FOR EXTERIOR VEHICULAR LIGHTING

Abstract of the Disclosure

5 Exterior lighting assemblies for use on vehicles include a flexible substrate
on which are mounted a plurality of solid-state light emitting devices. Preferably,
light emitting diodes (LEDs) are used for the solid-state light emitting devices,
although other types of devices can alternatively be employed. The light emitting
devices are connected to flexible conductive traces provided on the flexible
substrate and leads are provided to connect to the power supply on the vehicle so
10 that electrical current can be selectively supplied to energize the light emitting
devices. The flexible substrate is adapted to be mounted on the exterior surface of
a vehicle, for example, as a tail lamp assembly, or as a headlamp. Light emitting
devices that emit different colored light can be used to provide red light to
indicate slowing of the vehicle due to braking, amber light for turn signal
15 indication, and white light to illuminate the surface over which the vehicle is
traveling. A flexible optically transparent cover protects the light emitting
devices. Due to their flexibility, the light assemblies can be conformed around a
curved exterior surface of a vehicle.

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